

ABSTRACT OF THE DISCLOSURE

A tunable micro-lens and micro-lens array for use in optical communications are disclosed. The micro-lens uses thermo optical material and a temperature controller to adjust the temperature and, hence, the index of refraction of the thermo optical material. In one embodiment, a single temperature controller is used to maintain an array of micro-lenses at a desired temperature. In an alternate embodiment, the individual lenses in an array are separately tunable. The invention may be used with either 2D or 3D lenses, and is well suited for use with existing planar lightwave circuit (PLC) technology.